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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/712,931	11/16/2000	Mark A. Kirkpatrick	BS00-058	3158

28970 7590 12/31/2003

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EXAMINER

PATEL, ASHOKKUMAR B

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 12/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/712,931

Applicant(s)

KIRKPATRICK ET AL.

Examiner

Ashok B. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Application Number 09/712,931 was filed on 11/16/2000. Claims 1-22 are subject to examination.

Specification

2. The disclosure is objected to because of the following informalities:

In claim 22, line 1, it appears "29" was intended to be "20". Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gebauer (US 6,446,117) in view of Hunter et al. (hereinafter Hunter)(US 6,223,172).

Referring to claim 1,

The reference Gebauer teaches the repository (management file) and cool ice engine (process) (Fig. 4, elements 80 and 76) in the computer-to-computer transaction environment. The repository is intended to store the variables (transaction type-attribute strings) from a first service request that may be used with one or more subsequent service requests , as such these variables are accessible for immediate use

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for further transactions. (Abstract and col.4, lines 34-57). Gebauer also teaches that cool ice engine (process) determines the output (action) after processing the variables (transaction type-attribute strings). (col.8, lines 53-65). The reference Gebauer fails to teach applying the masks to the variables. The reference Hunter teaches the mask format and teaches to apply the masks to the IP addresses and how the masked IP addresses are used for searching for a longest match for the address by comparing a portion of the address indicated by a mask and progressively shortening the mask until a matching entry is located. (col.3, lines 4-10, Fig. 3, Fig. 8). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify Gebauer's repository for permanently storing the transaction type-attribute strings with the action value processed by modified cool ice engine (process) where the transaction type-attribute strings are stored with or without masks as taught by Hunter. Because, the masked transaction type-attribute strings are used for searching for a longest match by comparing a portion indicated by a mask and progressively shortening the mask until a matching entry is located.

Referring to claim 2,

The reference Gebauer teaches the gateway computer to which the first and second computer is connected (col. 3, lines 58-67 and col. 4, lines 1-9, Fig. 3, element 50 and Fig.5, element 100) and the process (Fig.5, elements 102, 104) incorporated by the gateway computer.

Referring to claim 3,

The reference Gebauer teaches the gateway computer to which the first and second computer is connected (col. 3, lines 58-67 and col. 4, lines 1-9, Fig. 3, element 50 and Fig.5, element 100) and the manager file (Fig.5, element 106). This repository is loaded into a memory on the gateway computer at runtime. (col.9, lines 59-66).

Referring to claim 4,

Keeping in mind the teachings of reference Gebauer, the reference Gebauer fails to teach applying the masks to the variables. The reference Hunter teaches to apply the masks to the IP addresses and how the masked IP addresses are used for searching for a longest match for the address by comparing a portion of the address indicated by a mask and progressively shortening the mask until a matching entry is located. (col.3, lines 4-10). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify Gebauer's repository (manager file) for permanently storing the transaction type-attribute strings with the action value with or without masks as taught by Hunter. Because, the non-masked and masked transaction type-attribute strings can be used for searching, in steps, for a match by comparing to a non-masked transaction type-attribute string, then to a portion indicated by a mask, and then progressively shortening the mask until a matching entry is located.

Referring to claims 5 and 6,

Keeping in mind the teachings of reference Gebauer, the reference Gebauer fails to teach applying the masks to the variables (transaction type-attribute strings). Although, the reference Gebauer teaches that its repository (management file) is capable of storing the variable at runtime and providing the variable at runtime for more than one transactions, and cool ice service handler of cool ice engine (process) retrieving the variables from the repository (col. 9, lines 59-67 and col. 10, lines 1-13), it also fails to teach the methodology for retrieving for a required variable by matching in steps from a literal match prior to looking for a non-literal match. The reference Hunter teaches the address resolution unit (Fig. 2, element 230 "ARU", Fig.5) as a means to look for a longest match (literal match) to progressively using the shorter masks (non-literal match) until a matching entry is located. And once the match is found the data is then forwarded (process performs the action). (Abstract, Fig. 4, col. 7, lines 19-35). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify Gebauer's ice cool service handler of ice cool engine (process) to incorporate the Hunter's ARU as means to begin and look for a literal match prior to looking for a non-literal match and make the process perform the action determined by the transaction type-attribute string having the minimum mask matching. Because, the action initiated by the process associated with the searched transaction type-attribute after the searching in steps in this manner, the outbound message can be delivered promptly and accurately without revising the message information which is time consuming and expensive process.

Referring to claims 7, 8, 9, 12 and 13,

The reference Gebauer teaches the repository (management file) and cool ice engine (process) (Fig. 4, elements 80 and 76) in a computer-to-computer transaction environment. The repository is intended to store the variables (transaction type-attribute strings) from a first service request that may be used with one or more subsequent service requests, as such these variables are accessible for immediate use for further transactions. (Abstract and col.4, lines 34-57). This repository is loaded (created) into a memory on the gateway computer at runtime. (col. 9, lines 59-66). Gebauer also teaches that cool ice engine (process) determines the output (action) after processing the variables (transaction type-attribute strings). (col.8, lines 53-65). The reference Gebauer fails to teach applying the masks to the variables. Although, the reference Gebauer teaches that it's repository (management file) is capable of storing the variable at runtime and providing the variable at runtime for more than one transactions, and cool ice service handler of cool ice engine (process) retrieving the variables from the repository (col. 9, lines 59-67 and col. 10, lines 1-13), it also fails to teach the methodology for retrieving for a required variable by matching in steps from a literal match prior to looking for a non-literal match. The reference Hunter teaches to apply the masks to the IP addresses and how the masked IP addresses are used for searching for a longest match for the address by comparing a portion of the address indicated by a mask and progressively shortening the mask until a matching entry is located. (col.3, lines 4-10). The reference Hunter also teaches the address resolution unit (Fig. 2, element 230 "ARU", Fig.5) as a means to look for a longest match (literal

match) to progressively using the shorter masks (non-literal match) until a matching entry is located. And once the match is found the data is then forwarded (process performs the action). (Abstract, Fig. 4, col. 7, lines 19-35). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to devise a method for managing transactions with modified Gebauer's repository for permanently storing the transaction type-attribute strings with the action value processed by modified Gebauer's ice cool service handler of ice cool engine (process) incorporating the Hunter's ARU as means to begin and look for a literal match prior to looking for a non-literal match and make the process perform the action determined by the transaction type-attribute string having the minimum mask matching. Because, for one, the masked transaction type-attribute strings are used for searching for a longest match by comparing a portion indicated by a mask and progressively shortening the mask until a matching entry is located, and for two, the action initiated by the process associated with the searched transaction type-attribute after the searching in steps in this manner, the outbound message can be delivered promptly and accurately without revising the message information which is time consuming and expensive process.

Referring to claim 10,

Keeping in mind the teachings of Gebauer, Gebauer fails to teach the methodology for retrieving for a required variable by matching in steps from a literal match prior to looking for a non-literal match. The reference Hunter teaches the address resolution unit (Fig. 2, element 230 "ARU", Fig.5) as a means to look for a longest match (literal

match) to progressively using the shorter masks (non-literal match) until a matching entry is located. And once the match is found the data is then forwarded (process performs the action). (Abstract, Fig. 4, col. 7, lines 19-35). The reference Hunter also teaches that if the match is not found, the matching process may take a protocol dependent processing. (Fig. 4, element 450, col. 7, lines 28-32). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to devise a matching method that generate an error message as a resolution if the match is not found. Because, the outbound response is based on the match, and if the match is not found the process is not expected to send incorrect outbound response.

Referring to claim 11,

Claim 11 is a method that represents the step in the system of claim 3. Therefore, claim 11 is rejected for the reasons set forth for the claim 3.

Referring to claim 14,

The reference Gebauer teaches the repository (management file) and cool ice engine (process) (Fig. 4, elements 80 and 76) in a computer-to-computer transaction environment. The repository is intended to store the variables (table of transaction type-attribute strings) from a first service request that may be used with one or more subsequent service requests, as such these variables are accessible for immediate use for further transactions. (Abstract and col.4, lines 34-57). Gebauer also teaches that

cool ice engine (process) determines the output (action) after processing the variables (transaction type-attribute strings). (col.8, lines 53-65). The reference Gebauer teaches the gateway computer to which the first and second computer is connected (col. 3, lines 58-67 and col. 4, lines 1-9, Fig. 3, element 50 and Fig.5, element 100) and its functions as claimed, and the process (Fig.5, elements 102, 104) incorporated by the gateway computer. The reference Gebauer fails to teach applying the masks to the variables. The reference Hunter teaches the mask format and teaches to apply the masks to the IP addresses and how the masked IP addresses are used for searching for a longest match for the address by comparing a portion of the address indicated by a mask and progressively shortening the mask until a matching entry is located. (col.3, lines 4-10). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify Gebauer's repository for permanently storing the transaction type-attribute strings with the action value processed by modified cool ice engine (process) where the transaction type-attribute strings are stored with or without masks as taught by Hunter and also, it would have been obvious to one having ordinary skill in the art at the time of invention was made to provide a gateway computer as part of the system where the process is executed and through which the first and second computer systems do communicate. Because, the masked transaction type-attribute strings are used for searching for a longest match by comparing a portion indicated by a mask and progressively shortening the mask until a matching entry is located, and as taught by Gebauer, in order to permit access to the data base management system, one must first provide a user interface, called a gateway, which translates transaction

data transferred from the user over the internet in HTML format into a format from which data base management system commands and inputs may be generated and also gateway converts the data base management system responses and outputs into an HTML document for display on the user's internet terminal.

Referring to claims 15 and 16,

The reference Gebauer teaches the gateway computer to which the first and second computer is connected (col. 3, lines 58-67 and col. 4, lines 1-9, Fig. 3, element 50 and Fig.5, element 100) and the manager file (Fig.5, element 106). This repository is loaded into a memory on the gateway computer at runtime. (col. 9, lines 59-66). The repository is intended to store the variables (table of transaction type-attribute strings) from a first service request that may be used with one or more subsequent service requests, as such these variables are accessible for immediate use for further transactions. (Abstract and col.4, lines 34-57).

Referring to claim 17,

Keeping in mind the teachings of reference Gebauer, the reference Gebauer fails to teach applying the masks to the variables. The reference Hunter teaches to apply the masks to the IP addresses and how the masked IP addresses are used for searching for a longest match for the address by comparing a portion of the address indicated by a mask and progressively shortening the mask until a matching entry is located. (col.3, lines 4-10). Therefore, it would have been obvious to one having ordinary skill in the art

at the time of invention was made to modify Gebauer's repository (Table) for permanently storing the transaction type-attribute strings with the action value with or without masks as taught by Hunter. Because, the non-masked and masked transaction type-attribute strings can be used for searching, in steps, for a match by comparing to a non-masked transaction type-attribute string, then to a portion indicated by a mask, and then progressively shortening the mask until a matching entry is located.

Referring to claim 18 and 19,

Keeping in mind the teachings of reference Gebauer, the reference Gebauer fails to teach applying the masks to the variables (transaction type-attribute strings). Although, the reference Gebauer teaches that its repository (Table) is capable of storing the variable at runtime and providing the variable at runtime for more than one transactions, and cool ice service handler of cool ice engine (process) retrieving the variables from the repository (table) (col. 9, lines 59-67 and col. 10, lines 1-13), it also fails to teach the methodology for retrieving a required variable by matching in steps from a literal match prior to looking for a non-literal match. The reference Hunter teaches the address resolution unit (Fig. 2, element 230 "ARU", Fig.5) as a means to look for a longest match (literal match) to progressively using the shorter masks (non-literal match) until a matching entry is located. And once the match is found the data is then forwarded (process performs the action). (Abstract, Fig. 4, col. 7, lines 19-35). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify Gebauer's ice cool service handler of ice cool engine (process) to

incorporate the Hunter's ARU as means to begin and look for a literal match prior to looking for a non-literal match and make the process perform the action determined by the table having the minimum mask matching. Because, the action initiated by the process associated with the searched transaction type-attribute after the searching in steps in this manner, the outbound message can be delivered promptly and accurately without revising the message information which is time consuming and expensive process.

Referring to claim 20, 21 and 22,

The reference Gebauer teaches the variables (data structure) that are stored in repository. The repository is intended to store the variables from a first service request that may be used with one or more subsequent service requests, as such these variables are accessible for immediate use for further transactions. (Abstract and col.4, lines 34-57). This repository is loaded into a memory on the gateway computer at runtime. (col. 9, lines 59-66). The reference Gebauer fails to teach applying the masks to the variables. The reference Hunter teaches the mask format and teaches to apply the masks to the IP addresses and how the masked IP addresses are used for searching for a longest match for the address by comparing a portion of the address indicated by a mask and progressively shortening the mask until a matching entry is located. (col.3, lines 4-10, Fig. 3, Fig. 8). Hunter also teaches that the matching can be made protocol dependent depending upon the implementation of the process. (col. 7, lines 28-31). Therefore, it would have been obvious to one having ordinary skill in the

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art at the time of invention was made to design a data structure in accordance with the process implementation where the length of the mask is also controlled as taught by Hunter. In this case, the mask length is applied to the transaction code portion, because the goal is to reduce the revisions to the code modifications to the transaction codes and their associated attributes thereby reducing the time consumption and expenses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (703) 305-2655. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


Abp



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